

Amendments to the Claims:

The following claims will replace all prior versions of the claims in this application (in the unlikely event that no claims follow herein, the previously pending claims will remain):

1-32. (Cancelled).

33. (Currently Amended) An optoelectronic display device of high brightness and high contrast comprising:

at least two thin photoluminescent layers having unequal photoemission or absorption spectra or both, wherein said at least two thin photoluminescent layers are characterized in a high degree of polarization in their absorption and are characterized in an emission which is either polarized or not, wherein said layers have a thickness of less than about 1 mm and a dichroic ratio in their absorption of more than about 5, and said thin photoluminescent layers comprising one or more at least partially conjugated oligomers or one or more at least partially conjugated polymers or both; and

wherein said photoluminescent layers are located between a viewer and an electrooptical light valve; or said electrooptical light valve is located between the viewer and said photoluminescent layers; or said photoluminescent layers are inside said electrooptical light valve.

34. (Previously presented) An optoelectronic display device according to claim 33, wherein said photoluminescent layers have a dichroic ratio in its emission of more than about 5.

35. (Cancelled)

36. (Currently amended) A display device according to claim ~~33~~ 35, wherein said electrooptical light valve includes a liquid crystal cell having a liquid crystal layer which is electrically switchable.

33. (Currently Amended) An optoelectronic display device of high brightness and high contrast comprising:

at least two thin photoluminescent layers having unequal photoemission or absorption spectra or both, wherein said at least two thin photoluminescent layers are characterized in a high degree of polarization in their absorption and are characterized in an emission which is either polarized or not, wherein said layers have a thickness of less than about 1 mm and a dichroic ratio in their absorption of more than about 5, and

said thin photoluminescent layers comprising one or more at least partially conjugated oligomers or one or more at least partially conjugated polymers or both; and

wherein said photoluminescent layers are located between a viewer and an electrooptical light valve; or said electrooptical light valve is located between the viewer and said photoluminescent layers; or said photoluminescent layers are inside said electrooptical light valve.

34. (Previously presented) An optoelectronic display device according to claim 33, wherein said photoluminescent layers have a dichroic ratio in its emission of more than about 5.

35. (Cancelled)

36. (Currently amended) A display device according to claim 33 ~~35~~, wherein said electrooptical light valve includes a liquid crystal cell having a liquid crystal layer which is electrically switchable.

37. (Previously presented) A display device according to claim 33, wherein said device comprises a polarizer selected from the group consisting of absorbing polarizer, scattering polarizer and reflecting polarizer,

said polarizer being located between said photoluminescent layers and the viewer, or said photoluminescent layers being located between the viewer and said polarizer.

38. (Currently amended) A display device according to claim ~~33~~ 35, wherein said photoluminescent layers are located between the viewer and said electrooptical light valve.

39. (Currently amended) A display device according to claim ~~33~~ 35, wherein said electrooptical light valve is located between the viewer and said photoluminescent layers.

40. (Cancelled).

41. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a thickness of less than 300 μm .

42. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a thickness of less than 50 μm .

43. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a thickness of less than 10 μm .

44. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a dichroic ratio in their absorption of more than 10.

45. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a dichroic ratio in their absorption of more than 20.

46. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a dichroic ratio in their emission of more than 15.

47. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a dichroic ratio in their emission of more than 35.

48. (Previously presented) An optoelectronic display device of high brightness and high contrast comprising at least one thin photoluminescent layer that is characterized in a high degree of polarization in its absorption and that is characterized in an emission which is either polarized or not, wherein said layer has a thickness of less than about 1 mm and a dichroic ratio in its absorption of more than about 5, and

said thin photoluminescent layer comprises one or more at least partially conjugated oligomers or one or more at least partially conjugated polymers or both, wherein said display device additionally comprises at least one electrooptical light valve, said photoluminescent layer being located inside said electrooptical light valve.

49. (Previously presented) A display device according to claim 48, wherein said thin photoluminescent layer is located inside said electrooptical light valve and acts as orientation layer.

50. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers are patterned.

51. (Previously presented) A display device according to claim 33 that is characterized in that said device comprises multiple elements, pixels or arrays thereof of said photoluminescent layers.

52. (Currently amended) A display device according to claim ~~33~~ 35 that is characterized in that said device comprises multiple electrooptical light valves.

53. (Previously presented) A display device according to claim 33, wherein said display device further comprises a light source and wherein said light source is characterized in that its emission spectrum overlaps with the absorption spectrum of said photoluminescent layers.

54. (Previously presented) A display device according to claim 33 that additionally comprises at least one dichroic mirror, said photoluminescent layers being located between said at least one dichroic mirror and the viewer.

55. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers are obtained by a technique selected from the group consisting of tensile orientation, oriented growth, friction, photo-induced alignment and alignment in electric, magnetic and flow fields or combinations thereof, of photoluminescent substances.

56. (Cancelled).

57. (Previously presented) A display device according to claim 33, wherein said oligomers or polymers comprise one or more unsubstituted or substituted phenyleneethynylene moieties wherein said moieties may be the same or different at each occurrence.

58. (Previously presented) A display device according to claim 33, wherein said device has a viewing angle of 160 degrees or more or a brightness of 50 cd/m² or more, or both.

59-64. (Cancelled).

37. (Previously presented) A display device according to claim 33, wherein said device comprises a polarizer selected from the group consisting of absorbing polarizer, scattering polarizer and reflecting polarizer,

said polarizer being located between said photoluminescent layers and the viewer, or said photoluminescent layers being located between the viewer and said polarizer.

38. (Currently amended) A display device according to claim 33 ~~35~~, wherein said photoluminescent layers are located between the viewer and said electrooptical light valve.

39. (Currently amended) A display device according to claim 33 ~~35~~, wherein said electrooptical light valve is located between the viewer and said photoluminescent layers.

40. (Cancelled).

41. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a thickness of less than 300 μm .

42. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a thickness of less than 50 μm .

43. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a thickness of less than 10 μm .

44. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a dichroic ratio in their absorption of more than 10.

45. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a dichroic ratio in their absorption of more than 20.

46. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a dichroic ratio in their emission of more than 15.

47. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a dichroic ratio in their emission of more than 35.

48. (Previously presented) An optoelectronic display device of high brightness and high contrast comprising at least one thin photoluminescent layer that is characterized in a high degree of polarization in its absorption and that is characterized in an emission which is either polarized or not, wherein said layer has a thickness of less than about 1 mm and a dichroic ratio in its absorption of more than about 5, and

said thin photoluminescent layer comprises one or more at least partially conjugated oligomers or one or more at least partially conjugated polymers or both, wherein said display device additionally comprises at least one electrooptical light valve, said photoluminescent layer being located inside said electrooptical light valve.

49. (Previously presented) A display device according to claim 48, wherein said thin photoluminescent layer is located inside said electrooptical light valve and acts as orientation layer.

50. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers are patterned.

51. (Previously presented) A display device according to claim 33 that is characterized in that said device comprises multiple elements, pixels or arrays thereof of said photoluminescent layers.

52. (Currently amended) A display device according to claim ~~33~~ 35 that is characterized in that said device comprises multiple electrooptical light valves.

53. (Previously presented) A display device according to claim 33, wherein said display device further comprises a light source and wherein said light source is characterized in that its emission spectrum overlaps with the absorption spectrum of said photoluminescent layers.

54. (Previously presented) A display device according to claim 33 that additionally comprises at least one dichroic mirror, said photoluminescent layers being located between said at least one dichroic mirror and the viewer.

55. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers are obtained by a technique selected from the group consisting of tensile orientation, oriented growth, friction, photo-induced alignment and alignment in electric, magnetic and flow fields or combinations thereof, of photoluminescent substances.

56. (Cancelled).

57. (Previously presented) A display device according to claim 33, wherein said oligomers or polymers comprise one or more unsubstituted or substituted phenyleneethynylene moieties wherein said moieties may be the same or different at each occurrence.

58. (Previously presented) A display device according to claim 33, wherein said device has a viewing angle of 160 degrees or more or a brightness of 50 cd/m² or more, or both.

59-64. (Cancelled).